

CLAIMS

1. A system for effecting redundant data storage, comprising:

a device that includes a local memory storage, a first communication element that permits communication with a remote data storage location, and a
5 chip that is programmed with an instruction set, and

a remote data storage location that includes a second communication element that permits communication with said first communication element.

wherein said instruction set includes: (i) one or more commands that cause automatic communication with said memory storage on a predetermined periodic basis to determine whether contents within said local memory storage have been modified relative to a prior communication with said memory storage; and (ii) one or more commands that cause automatic communication between said first communication element and said second communication element if it is determined that contents within said local memory storage have been modified relative to said prior communication with said local memory storage, said communication being effective to reposit said contents in a redundant manner within said remote data storage location.

2. A system according to claim 1, wherein said chip is a single semiconductor chip or a chip set.

- 20 3. A system according to claim 1, wherein said chip is executable on a dedicated microprocessor associated with said device.

4. A system according to claim 1, wherein said automatic communication between said first communication element and said second communication element is wireless.
5. A system according to claim 1, wherein said automatic communication between said first communication element and said second communication element is over a wired network.
6. A system according to claim 1, wherein said device is selected from the group consisting of a personal digital assistant, a cellular phone, a camera, a laptop computer, a desk top computer, a watch, a disc player, a server and a silo.
- 10 7. A system according to claim 1, wherein said device is a black box recorder associated with an airliner.
8. A system according to claim 7, wherein said black box recorder includes data collected by at least one of a cockpit voice recorder, a flight data recorder, a flight data recorder and a flight data acquisition unit.
- 15 9. A system according to claim 7, wherein said contents of local memory storage includes data selected from the group consisting of pre-amplified sounds from the cockpit, pre-amplified voices from the cockpit, time pressure, altitude, airspeed, vertical acceleration, magnetic heading, control-column position, rudder-pedal position, control-wheel position, horizontal stabilizer, fuel flow and combinations thereof.
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10. A system according to claim 1, wherein said chip is further programmed to cause encryption of said contents before communication to said remote data storage location.
11. A system according to claim 1, wherein said contents of said local memory storage define a send data object for communication to said remote data storage location.
12. A method for establishing redundant data storage for data stored within a mobile device, comprising:
 - (a) providing said mobile device with a local memory storage, a first communication element that permits communication with a remote data storage location, and a chip that is programmed with an instruction set, wherein said instruction set includes: (i) one or more commands that cause automatic communication with said memory storage on a predetermined periodic basis to determine whether contents within said local memory storage have been modified relative to a prior communication with said memory storage; and (ii) one or more commands that cause automatic communication between said first communication element and a second communication element associated with a remote data storage location if it is determined that contents within said local memory storage have been modified relative to said prior communication with said local memory storage;
 - (b) automatically determining whether data stored within said local memory storage has been modified; and

(c) if data stored within said local memory storage has been modified, automatically communicating said data to a remote data storage location.

13. A method according to claim 12, wherein said communication with said remote data storage location is wireless.

5 14. A method according to claim 12, wherein said mobile device is selected from the group consisting of a personal digital assistant, a cellular phone, a camera, a laptop computer, a watch, a disc player, a server and a silo.

15. A method according to claim 12, wherein said mobile device is a black box recorder associated with an airliner.

10 16. A method according to claim 15, wherein said black box recorder includes data collected by at least one of a cockpit voice recorder, a flight data recorder, a flight data recorder and a flight data acquisition unit.

15 17. A method according to claim 16, wherein said contents of local memory storage includes data selected from the group consisting of pre-amplified sounds from the cockpit, pre-amplified voices from the cockpit, time pressure, altitude, airspeed, vertical acceleration, magnetic heading, control-column position, rudder-pedal position, control-wheel position, horizontal stabilizer, fuel flow and combinations thereof.

20 18. A method according to claim 12, wherein said chip is further programmed to cause encryption of said contents before communication to said remote data storage location.

19. A method according to claim 12, wherein said contents of said local memory storage define a send data object for communication to said remote data storage location.
20. A method according to claim 12, further comprising communication data from
5 said remote data storage location to said local memory storage of said mobile device.